

WHAT IS CLAIMED IS:

1. A computer readable memory medium comprising video or audio data arranged thereon in a plurality of frames, and a hidden watermark arranged in at least one of said plurality of frames, said watermark including a first preselected pattern of data and a second preselected pattern of data, said first preselected pattern including information from which the geometric configuration of said second preselected pattern of data and said video or audio data within said frames can be determined, said second preselected pattern of data including information indicative of a desired message, said first and second preselected patterns of data being substantially hidden when said video or audio data is displayed or played on a display screen or player.

2. The computer readable memory medium of claim 1, wherein said first preselected pattern of data is arranged at a central portion of said at least one frame.

3. The computer readable memory medium of claim 1, wherein said second preselected pattern of data is arranged at portions other than said central portion of said at least one frame.

4. The computer readable memory medium of claim 1, further comprising an optical medium.

5. The computer readable memory medium of claim 4, further comprising a DVD.

6. The Computer readable memory medium of claim 4, wherein said first preselected pattern of data is arranged at a central portion of said at least one frame.

7. The computer readable memory medium of claim 1, wherein said desired message of said second preselected pattern of data comprises a do not copy message.

8. The computer readable memory medium of claim 1, wherein said first preselected pattern of data comprises a design having portions suitable to be converted into log polar coordinates.

9. The computer readable memory medium of claim 1, wherein said information from said first preselected pattern of data comprises position and size information such that the relative

position and size of said second preselected pattern of data and said video or audio data can be determined.

10. An optical medium comprising digital video data arranged in a plurality of video frames, and a hidden digital watermark arranged in at least one of said plurality of video frames, said hidden digital watermark including a first preselected pattern of digital data arranged at a central portion of at least one of said frames, and a second preselected pattern of digital data arranged within said at least one of said frames, said first preselected pattern including information from which the geometric configuration of said second preselected pattern of digital data and said video data within said frames can be determined, said second preselected pattern of digital data including information indicative of a desired message, said first and second preselected patterns of digital data being substantially hidden from view when the digital video data is displayed on a display screen.

11. The optical medium of claim 10, wherein said information from said first preselected pattern of digital data comprises position and size information such that the relative position and size of said second preselected pattern of digital data and said video data can be determined.

12. The optical medium of claim 10, wherein said second preselected pattern of digital data is arranged on the optical medium at portions other than said central portion of said video frames.

13. The optical medium of claim 10, wherein said desired message of said second preselected pattern of digital data comprises a do not copy message.

14. The method of claim 10, wherein said desired message of said second preselected pattern of digital data is arranged within a plurality of said video frames.

15. The optical medium of claim 10, wherein said first preselected pattern of digital data comprises a design having portions suitable to be converted into log-polar coordinates.

16. A method of detecting a hidden watermark message including first and second patterns of data arranged along with video or audio data within at least one frame on a computer readable memory medium, said method comprising the steps of:

Detecting said first preselected pattern of data;
Determining the geometric configuration of said first preselected pattern of data;
Comparing the actual geometric configuration of said first preselected pattern of data with reference geometric configuration information thereof stored in memory associated with a watermark detector;
Calculating any deviation between said actual geometric configuration of said first preselected pattern of data and said reference geometric configuration information thereof;
and
Utilizing any calculated deviation between said actual and reference geometric configurations of said first preselected pattern of data to detect said second preselected pattern of data.

17. The method of claim 16, wherein said actual and reference geometric configuration relates to at least one of the relative position and size of said second preselected pattern of data and said video or audio data.

18. The method of claim 16, wherein said first preselected pattern of data is arranged at a central portion of said at least one frame, and said second preselected pattern of data is arranged within said at least one frame at portions other than said central portion thereof, said step of detecting said first preselected pattern of data comprises locating said central portion of said at least one frame.

19. The method of claim 18, wherein said desired message of said second preselected pattern of data comprises a do not copy message, said method further comprises implementing said do not copy message to preclude copying of said video or audio data from said computer readable memory medium.

20. The method of claim 19, wherein said reference geometric configuration information comprises stored log-polar coordinate information, said method further comprising the steps of converting data corresponding to said actual geometric configuration of said first preselected pattern of data into log-polar coordinates, and comparing any deviation in said log-polar coordinates of said actual and reference geometric configuration information to determine a rotation angle, whereby said rotation angle is utilized to detect said desired message of said second predetermined pattern of data.

21. The method of claim 16, wherein said reference geometric configuration information comprises stored log-polar coordinate information, said method further comprising the steps of converting data corresponding to said actual geometric configuration of said first preselected pattern of data into log-polar coordinates, and comparing any deviation in said log-polar coordinates of said actual and reference geometric configuration information to determine a rotation angle, whereby said rotation angle is utilized to detect said desired message of said second predetermined pattern of data.

22. The method claim 16 wherein said computer readable memory medium comprises an optical medium, and all data thereon comprises digital data, said steps of said method comprising optically detecting all data on said optical medium.

23. A method of creating a hidden watermark message within video or audio data on a computer readable memory medium, said method comprising the steps of:

Embedding a first preselected pattern of data within at least one frame of data on said computer readable memory; and

Embedding a second preselected pattern of data within said at least one frame of data on said memory medium, said first preselected pattern of data including information from which the geometric configuration of said second preselected pattern of data and said video or audio data within said at least one frame of data can be detected, said second

preselected pattern including information indicative of a desired message, said first and second preselected patterns being substantially hidden when the video or audio data is displayed or played.

24. The method of claim 23, wherein said first preselected pattern of data is embedded on said memory medium at a central portion of said at least one frame.

25. The method of claim 24, wherein said second preselected pattern of data is embedded on said memory medium at portions other than said central portion of said at least one frame.

26. The method of claim 23, wherein said desired message of said second preselected pattern of data comprises a do not copy message.

27. The method of claim 23, wherein said desired message of said second preselected pattern of data is arranged within a plurality of said frames.

28. The method of claim 23, wherein said first preselected pattern of data comprises a design suitable to be converted into log-polar coordinates.

29. The method of claim 23, wherein said first preselected pattern of data comprises position and size information, whereby an associated watermark detection device can determine the actual position and size of said first preselected pattern of data and compare said actual position and size with reference position and size information stored in memory such that any deviation between said actual and reference position and size information is used to determine at least one of a resizing factor and rotation angle, which in turn is used to detect the desired message of said second preselected pattern of data.